DOCUMENT RESUME

ED 372 796 JC 940 434

AUTHOR Shipley, Dale
TITLE Outcome Based Education: Its Impact on Program Review and the Evaluation of Learners.
PUB DATE 94
NOTE 22p.; Paper presented at the Annual Conference of the Association of Canadian Community Colleges (Ottawa, Ontario, Canada, May 26-28, 1994).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Standards; Accreditation (Institutions); *College Planning; Community Colleges; *Educational Assessment; Foreign Countries; Outcomes of Education; *Self Evaluation (Groups); *State Standards; Two Year Colleges
IDENTIFIERS *Ontario; *Outcome Based Education

ABSTRACT

In March 1991, the College Standards and Accreditation Council (CSAC) Establishment Board, created by Canada's Minister of Education, proposed wide-ranging reforms for college education and training. This paper reviews some of the ways in which Algonquin College (AC), in Ontario, is planning to interface and articulate with CSAC initiatives to ensure full compliance and retain institutional autonomy. First, the CSAC initiatives are described for Ontario, indicating that they rely on learning outcomes as the basis for the definition of program standards and aim to establish system-wide outcome standards by province to ensure similar outcomes for similar college programs and demonstrate to the public that standards are being met. Next, characteristics of learning outcomes and how they are determined are reviewed, and information is presented on drafting learning outcomes statements. A curriculum model for outcomes-based education is then presented and assessment and evaluation strategies are discussed, including eight types of instruments or methods. Finally, the province-wide regulations for program review are described and the program review system at AC is detailed, including the use of critical performance indicators, cyclical program evaluation, ongoing program appraisal, program review, and the program review report. (KP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 372 796

OUTCOME BASED EDUCATION: ITS IMPACT ON PROGRAM REVIEW AND THE EVALUATION OF LEARNERS

ACCC CONFERENCE

OTTAWA

1994

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D. Shipley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Dale Shipley

Algonquin College

JC 940 434

OVERVIEW OF THE PRESENTATION (1 HOUR, 30 MINUTES)

1. Introduction to the Presentation

2. Ontario's "Vision" for the Colleges

   "Quality - Access - Accountability"

   "Performance - Results - Accountability"

3. The Role of Learning Outcomes

   (focus on performance standards)

4. Curriculum Design within an outcomes-based framework

   (how to help learners achieve results)

5. Assessment and Evaluation of Learner Achievement

   (verification of the results of learning)

6. Program Review

   (focus on accountability at the college and system-wide levels)

7. Issues and Questions

OUTCOMES-BASED EDUCATION IN THE COLLEGES: ITS IMPACT ON PROGRAM REVIEW AND THE EVALUATION OF LEARNERS

1. Introduction to the Presentation

This session is about one Ontario college's attempt to address system-wide educational reform initiatives to prepare for a "new economy".

In March 1992, the College Standards and Accreditation Council (CSAC) Establishment Board which was created by the Minister of Education on recommendation of the Vision 2000 Report (1990) released a Discussion Paper. This Paper proposed wide-ranging reform for college education and training within the context of four major new initiatives:

- general education
- generic skills standards
- vocational program standards
- system-wide program review.

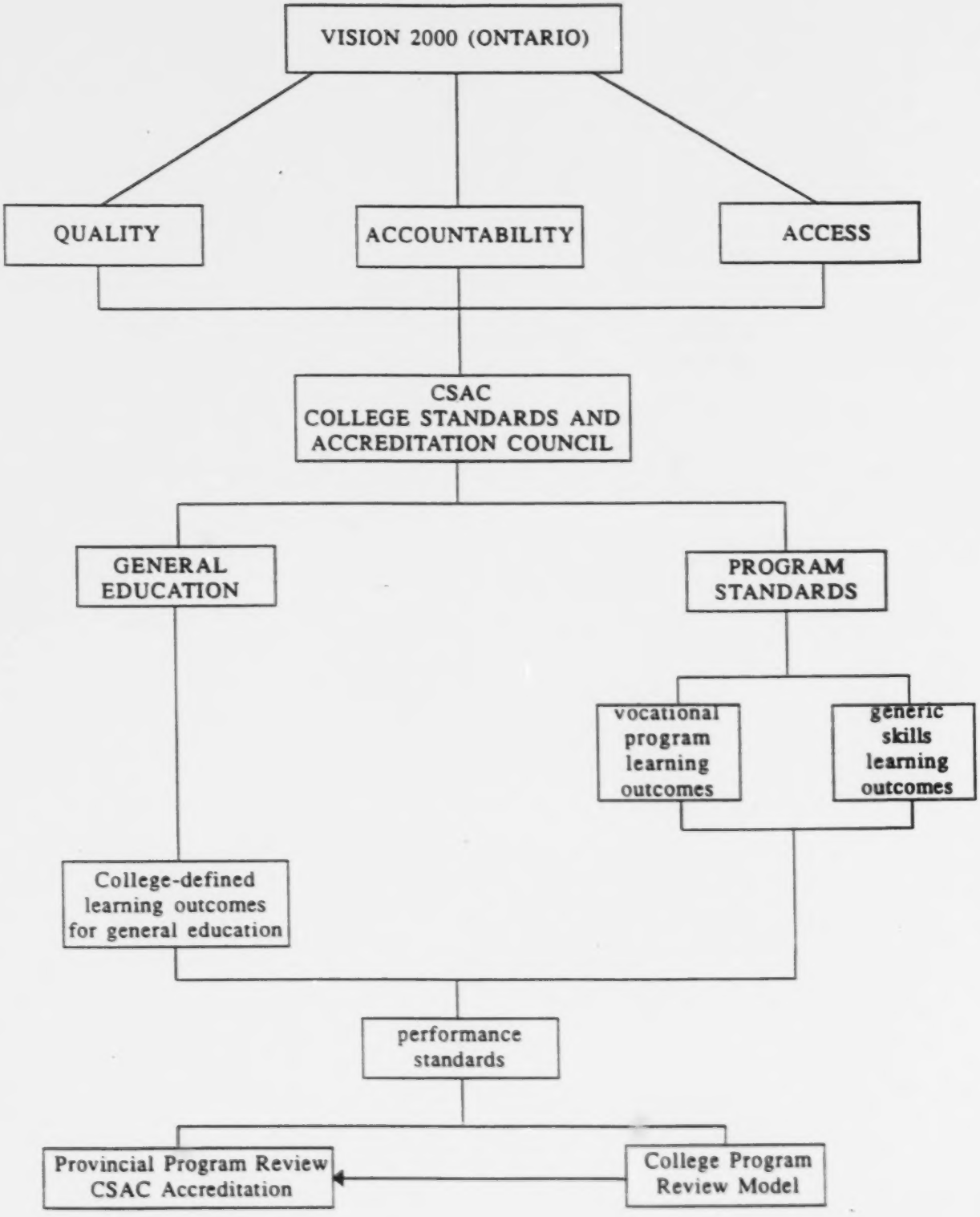
In December 1991, Algonquin College had already begun to lay plans for a second cycle of program review that would provide ongoing formative evaluation for programs as well as continuous, updated information on major program indicators such as admissions demand, student retention, program costs and graduate placement.

The way in which the Algonquin initiative and CSAC came together to create a dynamic process of change and revitalization within Algonquin College is a story worth telling. This presentation today will tell you about some of the creative ways in which our College is planning to interface and articulate with the CSAC (Provincial) initiatives in order to ensure full compliance with system requirements and retain our local autonomy, gain and maintain staff commitment to creative innovation and positive renewal, and foster greater allegiance to the College by our learner population.

2. Ontario's "Vision" for the Colleges

Plans for change and revitalization in college education in Ontario began in 1988 with the inauguration of the Vision 2000 Project which culminated in a Report entitled: Quality and Opportunity in June, 1990. The two components of a direction for change have been described as follows:

"Vision 2000: Quality and Opportunity is about assuring the quality of career education provided by Ontario's college system and enhancing opportunities for students to participate. It is about how the colleges can help ensure that Ontario has the skilled and adaptable workforce necessary to prosper in the global economy, while contributing to the development of individuals as informed, productive and socially responsible citizens."


VISION 2000 (ONTARIO)
QUALITY
ACCOUNTABILITY
ACCESS
CSAC
COLLEGE STANDARDS AND
ACCREDITATION COUNCIL
GENERAL
EDUCATION
PROGRAM
STANDARDS
vocational
program
learning
outcomes
generic
skills
learning
outcomes
College-defined
learning outcomes
for general education
performance
standards
Provincial Program Review
CSAC Accreditation
College Program
Review Model

3. The Role of Learning Outcomes (focus on performance standards)

The CSAC initiatives rely on learning outcomes as the basis for the definition of program standards. The CSAC Establishment Board Report described the introduction of learning outcomes as a vehicle for addressing accountability as follows:

"The goal of establishing system-wide outcome standards is to attempt, on a province-wide basis, to ensure similar outcomes for similar college programs...and to ensure the public that these standards are being met."

A paper entitled "Guidelines to the Development of Standards of Achievement through Learning Outcomes" (January, 1994), defined learning outcomes this way:

"Learning outcomes represent culminating demonstrations of learning and achievement. They are not simply a listing of discrete skills, nor broad statements of knowledge and comprehension. They describe performances that demonstrate that significant learning has been verified and achieved by graduates of the program."

The paper continues: "Readily amenable to system-wide application and review, with an increased emphasis on learner achievement of clearly defined performances, learning outcomes provide support for both of the fundamental goals of reform, namely, accountability and accessibility".

What are Learning Outcomes?

Characteristics of Learning Outcomes

Learning Outcomes:

- describe essential, significant, meaningful, role performances that all college graduates should demonstrate to be effective in their vocational and personal lives
- are verifiable using a variety of assessment methods which may be quantitative measurement or qualitative reporting
- represent transferable abilities in that the role performances may be relevant to a range of work and/or life contexts
- do not dictate specific curriculum, i.e. subject matter/content, teaching strategies or assessment methods
- must all be reliably demonstrated by all learners before graduation.

How Are Learning Outcomes Determined?

Learning Outcome statements for programs are determined through a process of consultation with employers, practitioners and educators. They do not simply reflect existing curriculum. The most likely steps in the development of learning outcomes for programs is as follows:

1. Create a profile of the effective graduate by listing the characteristics that are present in an individual who is most likely to succeed in a vocation.

2. Envisage future trends in the vocational area, such as technological change, and their implications for the graduate working in the area.

3. Postulate the performances that graduates of a program should demonstrate in order to practise successfully in the vocation.

4. Distill the information that has been generated in Steps 1-3 into a list by:

   a) grouping some items together
   b) assigning priority to items
   c) eliminating non-essential items
   d) adding forgotten items
   e) finalizing the list.

5. Prepare draft learning outcomes that are consistent with the essential characteristics of learning outcomes.

6. Review and revise the learning outcomes by checking them against the criteria of essential characteristics.

7. Submit the learning outcomes to a process of validation and review.

HOW ARE LEARNING OUTCOME STATEMENTS DRAFTED?

1. Capture one essential performance at a time.

2. Ensure that the learning outcome reflects a performance that is essential, significant and transferable.

3. Ensure that the learning outcome is not stated too broadly.

4. Ensure that the learning outcome is not stated too narrowly.

5. Ensure that the learning outcome does not dictate curriculum.

6. Ensure that the learning outcome describes post-secondary college level learning.

7. Ensure that the wording of the learning outcome is clear.

8. Ensure that the learning outcome is verifiable.

LEARNING OUTCOMES FOR OUTCOMES-BASED EDUCATION

Outcomes-based education is based on the notion that statements of the learning to be achieved by learners at the end of a unit of learning, i.e. learning outcomes, serve as **standards** for assessment of learning.

Program standards which include program learning outcome statements become criteria for determining the extent to which programs have met their obligations to learners, funding agencies and the public.

The concept of learning outcomes within outcomes-based education emphasizes the:

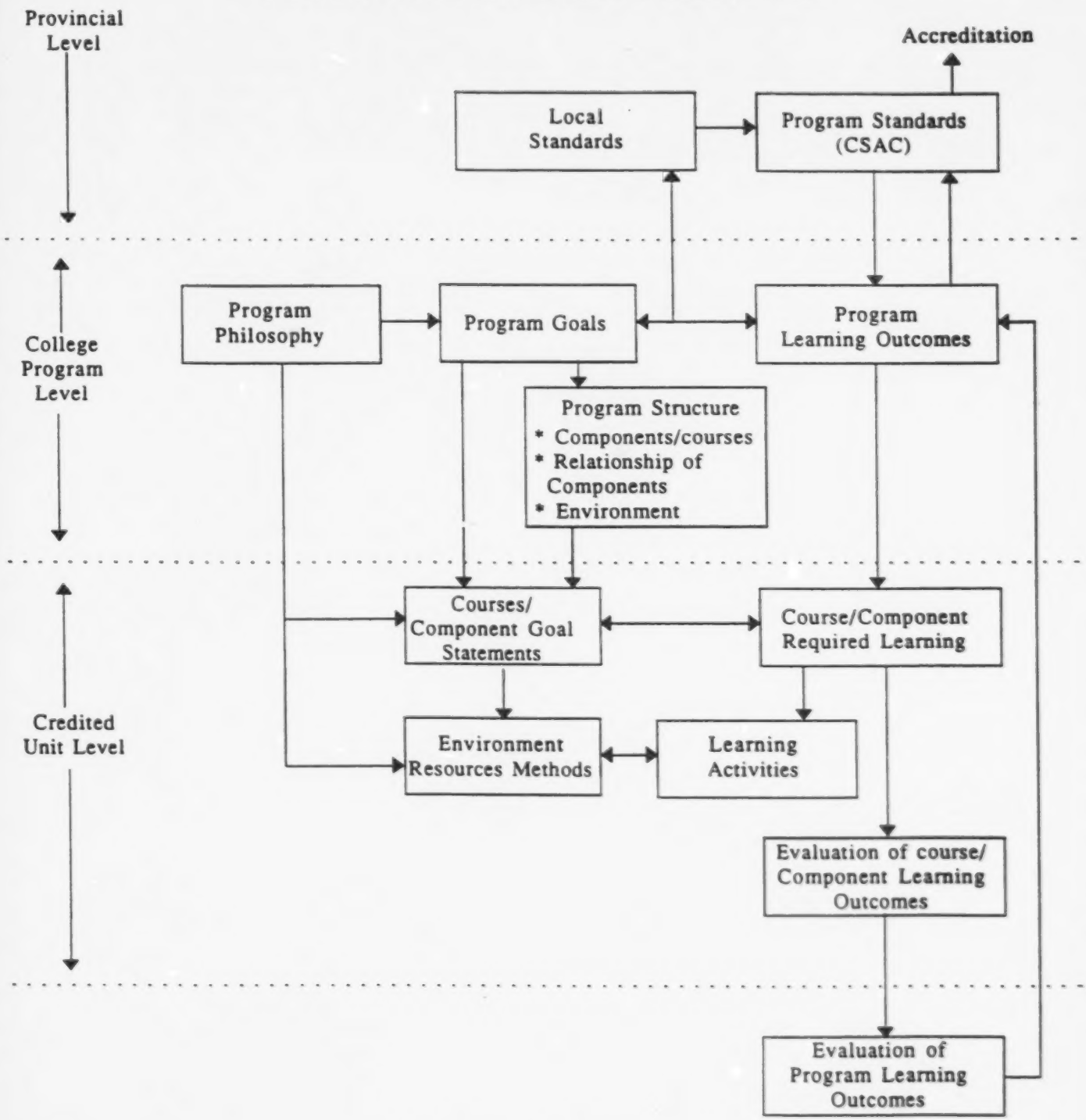
- high performance of learners who graduate from our educational systems
- importance of verifying results achieved at the end of a unit of learning
- importance of accountability by our educational institutions.

Learning outcomes are the exit standards which serve as the performance criteria for evaluating learner achievement at the end of a learning unit or for assessing learning achieved through experience that is eligible for PLA credit.

CURRICULUM DESIGN WITHIN AN OUTCOMES-BASED FRAMEWORK

- Write learning outcomes that identify significant, essential learning.
- Use learning outcomes statements as exit standards - describing what all learners must achieve to receive credential.
- Design down from these exit outcomes.
- Create learning opportunities/activities that allow diverse learners to practice and eventually achieve learning outcomes.
- Plan assessment and evaluation that is directly related to learning outcomes.

OUTCOMES BASED CURRICULUM MODEL FOR POST-SECONDARY PROGRAMS



ASSESSMENT AND EVALUATION OF LEARNER ACHIEVEMENT

Verification of the Results of Learning

IN OUTCOMES-BASED LEARNING MODELS, GRADUATES HAVE TO "RELIABLY DEMONSTRATE" ACHIEVEMENT OF THE LEARNING OUTCOME.

"RELIABLY DEMONSTRATE" IMPLIES THAT LEARNERS WILL HAVE HAD OPPORTUNITIES TO PRACTISE, BE ASSESSED, AND RECEIVE FEEDBACK ON THEIR PROGRESS TOWARD EACH LEARNING OUTCOME.

THEREFORE, IN ORDER TO GRANT CREDIT FOR ACHIEVEMENT OF A LEARNING OUTCOME, FACULTY WILL HAVE DOCUMENTED THE SUCCESSFUL PERFORMANCE OF THE EMBEDDED SKILLS AND KNOWLEDGE INHERENT IN A LEARNING OUTCOME AS WELL AS THE ROLE PERFORMANCE IDENTIFIED BY THE WHOLE LEARNING OUTCOME IN MORE THAN ONE OR TWO CONTEXTS.

PLANNING ASSESSMENT STRATEGIES FOR OUTCOMES-BASED EDUCATION

- A PLAN FOR THE ASSESSMENT OF LEARNERS SHOULD BE CLEARLY DESCRIBED.
- ASSESSMENT IS CONTINUOUS AND PROGRESSIVE.
- ANY INHERENT BIAS IN THE ASSESSMENT APPROACH SHOULD BE IDENTIFIED IN ADVANCE AND ELIMINATED AS MUCH AS POSSIBLE.
- AS LEARNERS PROGRESS TOWARD THE ACHIEVEMENT OF LEARNING OUTCOMES TEACHERS NEED TO PROVIDE FEEDBACK ON THEIR PROGRESS.
- EVALUATION OF PERFORMANCE OF A LEARNING OUTCOME WILL VERIFY THE LEARNER'S ABILITY TO INTEGRATE ALL ASPECTS OF THE PERFORMANCE.

EXAMPLES OF TYPES OF ASSESSMENT INSTRUMENTS OR METHODS

- observational recording and reporting
- self-evaluation
- peer assessment
- paper and pencil testing
- assignments and projects
- portfolios
- oral exams/interviews
- comprehensive testing

STANDARDS-REFERENCED EVALUATION

- EVALUATION OF LEARNER PERFORMANCE RELATED TO LEARNING OUTCOMES RELIES ON A CONFIGURATION OR PATTERN OF PERFORMANCE RELATED TO AN OUTCOME TAKEN OVER A SERIES OF TESTING/EVALUATION EPISODES IN WHICH THE LEARNER IS ASSESSED;

- EVALUATION CRITERIA ARE KNOWN IN ADVANCE BY THE LEARNER AND THE TEACHER;

- EVALUATION CRITERIA AND PERFORMANCE STANDARDS MAY CUT ACROSS A WIDE RANGE OF SUBJECT AREAS;

- EXPLICIT ASSESSMENT CRITERIA SHOULD BE COMMONLY UNDERSTOOD AND AGREED-UPON BY TEACHERS;

- SHOULD MAKE DIRECT AND EXTENSIVE USE OF TEACHERS' QUALITATIVE JUDGEMENTS;

- EVALUATION REPORTS REFLECT THE LEARNER'S SUCCESSFUL PERFORMANCE OF THE LEARNING OUTCOME; THEY MAY BE ANECDOTAL REPORTS OR CODES USED TO DESIGNATE THAT A LEARNING OUTCOME HAS BEEN ACHIEVED;

- IT IS NOT IMPORTANT TO RANK THE LEARNER ACCORDING TO THE PERFORMANCE OF CLASSMATES OR AGAINST A NORMATIVELY-BASED SCORE ESTABLISHED FOR A POPULATION WITH PARTICULAR CHARACTERISTICS AS IN STANDARDIZED TESTING; A LEARNER EITHER SUCCESSFULLY COMPLETES A LEARNING OUTCOME OR NOT;

- A PROGRAM OF STUDY IS FINISHED WHEN THE LEARNER HAS SUCCESSFULLY COMPLETED ALL LEARNING OUTCOMES ATTACHED TO A PROGRAM OR CREDENTIAL;

ASSESSMENT AND EVALUATION OF LEARNER ACHIEVEMENT OF LEARNING OUTCOMES

LEARNING OUTCOME

LEARNING ACTIVITIES

Implied learning/teaching methods:

information/ knowledge through:	skills through task performances	demonstrated understanding through task or role performances with application in simulated contexts	practise role performances in workplace or community settings
e.g. lecture software/ CAI textbooks manuals workbooks	e.g. assignments projects presentations in-class activities observation reports	e.g. games simulations case studies/problem solving role play projects	e.g. fieldwork clinicals work placement internship work/life experience

Assessment methods:

tests quizzes examinations essays research papers	criterion-based scoring anecdotal feedback	performance tests criterion-based scoring portfolio	observations/ anecdotal reporting performance testing journals/diaries portfolio
peer assessment or self-evaluation using anecodotal or ratings methods →			
challenge tests	consolidation testing or assignments: e.g. comprehensive exams: oral, written or hands-on →		portfolio preparation

Evaluation:

Criterion referenced	Criterion referenced	standards referenced	standards referenced

PROGRAM REVIEW

(focus on accountability at the college and system-wide levels)

Ontario's CSAC Report states that system-wide program review will address both formative and summative evaluation functions. It will also collect both quantitative and qualitative data about programs through an Inventory of Basic Descriptive Program Information with the use of a series of common indicators or instruments.

Each college will be asked to submit a **Critical Appraisal** of its program under review which will include statistical information, evaluative comment drawn from several external and internal sources and indications of actions taken to meet any problems identified.

A Provincial review panel appointed by CSAC will likely evaluate the Program Standards document, the Basic Inventory, data collected through Common Indicators and the Critical Appraisals. The Panel will determine if any follow-up is required such as additional information or a site visit.

In addition to reviewing each program's Critical Appraisal, the Panel will evaluate the Provincial Program Standards documents in terms of their appropriateness and achievability by learners.

Review panels may recommend one of the following for each college's program:

- unconditional accreditation
- conditional accreditation
- accreditation withdrawn.

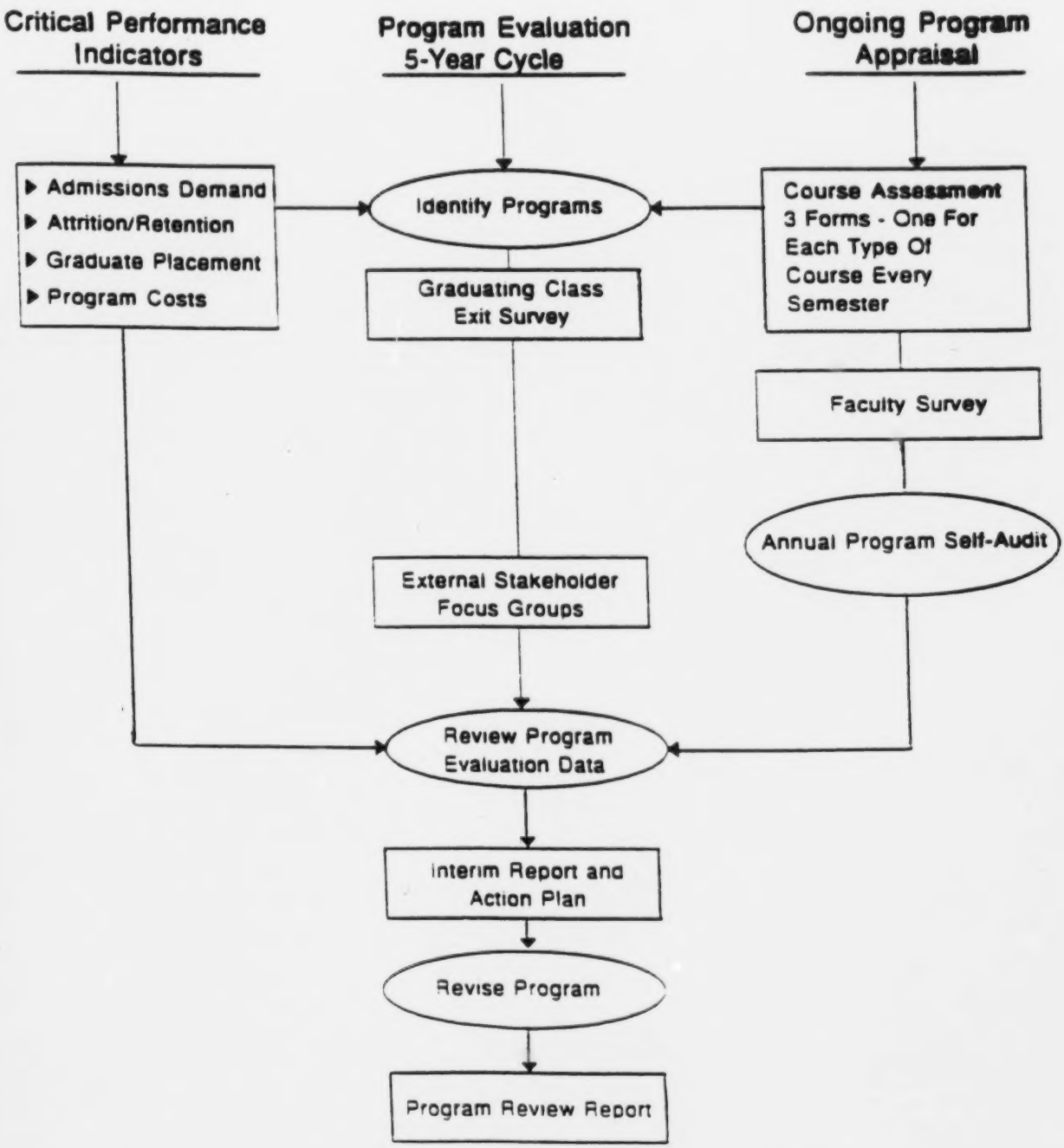
Programs accredited without condition may not be reviewed until the next cycle (e.g. five years). Conditionally accredited programs may be reviewed every one or two years.

Withdrawal of accreditation may lead to a recommendation that the program cease to receive Provincial funding.

FUNCTION AND PURPOSE OF PROGRAM REVIEW AT ALGONQUIN COLLEGE

- TO PROMOTE INSTITUTIONAL LEARNING AND RENEWAL
- TO GUIDE DECISION-MAKING
- TO PROMOTE ACCOUNTABLITY THROUGH SYSTEMATIC SUMMATIVE EVALUATION REPORTS
- TO PROMOTE ACCOUNTABILITY THROUGH SYSTEMATIC FORMATIVE EVALUATION REPORTS
- TO PROMOTE RATIONAL, EQUITABLE AND EFFICIENT ALLOCATION OF RESOURCES

THE PROGRAM REVIEW SYSTEM



COMPONENTS OF THE PROGRAM REVIEW SYSTEM - OVERVIEW

1. Critical Performance Indicators (CPI's)

The CPI's:

- are summative/quantitative
- are collected continuously
- include data related to:
  - admissions demand
  - attrition/retention
  - program costing
  - placement/employment

2. Cyclical Program Evaluation

This component:

- follows a 5 year cycle
- obtains feedback from external stakesholders
  eg. graduates
  employers
  advisory comittee members
- obtains feedback from students
  eg. graduating class exit survey - linked to learner achievement of learning outcomes
- has survey results processed and tabulated centrally by Computer Services
- ensures that data analysis is supervised by the Planning Department

3. Ongoing Program Appraisal

The Program Review system intends to foster the continuing review and renewal of programs and courses offered by the College. The system should ensure that academic staff are supported in their regular examination and improvement of the courses and programs they deliver.

The Ongoing Appraisal of courses and programs is ensured through:

- systematic, regular Course Assessment, every course every term - linked to learner achievement of learning outcomes
- anual Program Self-Audit - linked to curriculum design to promote achievement of program learning outcomes
- Faculty Survey

4. Program Review

The Interim Report and Action Plan report on the input derived from Cyclical Program Evaluation and Ongoing Program Appraisal and the Critical Performance Indicators. The Program Review Report outlines the revisions made to the program based on the Interim Report. It also reports on the present status of the program following program revision.

5. Program Review Report

Program Critical Appraisal (CSAC)

ISSUES AND QUESTIONS

ISSUES:

- outcomes-based versus time-based approaches to college level learning
- resources needed to assist faculty in curriculum planning to facilitate learner achievement of learning outcomes
- resources and costs associated with cyclical program evaluation and ongoing program appraisal
- grading practices - norm-referenced - to criterion-referenced - to standards-referenced???
- other issues:

QUESTIONS:

Conclusion.

ACCC'94